







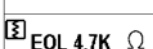






Fire Alarm Symbol Legend							
SYMBOL	DESCRIPTION	PART NUMBER	MODEL	QUANTITY	USER TEXT	UL	FM
	6 AMP EXPANDABLE NAC, 4 CIRCUIT	HPF24S6	HPF24S6	1		S6677	
	STROBE, M-C, RED, CEILING	GCS24CR	GCS24CR	16		464, 1971	Approved
	STROBE, M-C, RED, CEILING	GCS24CR	GCS24CR	2		464, 1971	Approved
	STROBE, M-C, RED, CEILING	GCS24CR	GCS24CR	2	EX	464, 1971	Approved
	HORN/STROBE, 2 WIRE, M-C, RED, CEILING	GCC24-CR	GCC24CR	8		464, 1971	Approved
	HORN/STROBE, 2 WIRE, M-C, RED, CEILING	GCC24-CR	GCC24CR	2		464, 1971	Approved
	HORN/STROBE, 2 WIRE, M-C, RED, CEILING	GCC24-CR	GCC24CR	7		464, 1971	Approved
	SMOKE, PHOTO, 2-WIRE	2W-B	2W-B	2	EX	S911	3011446
	END OF LINE RESISTOR	EOL	EOL	4			
	SMOKE, PHOTO, 2-WIRE	2W-B	2W-B	1		S911	3011446
	135 °F (57° C) FIXED TEMP	5603	5603	2	EX	S2101	Approved
	HORN, RED	LHNR	LHNR	9	EX	UL 1971, UL464	
	HORN, RED	LHNR	LHNR	1	EX	UL 1971, UL464	

Battery Calculations for Panel: P1						
Part No:HPF24S6 - 6 AMP EXPANDABLE NAC, 4 CIRCUIT						
Job number: 8-17-0206 Job name: TABLEAU						
Address 1: 401 PARK PLACE CENTER						
Address 2: KIRKLAND, WA 98033						
Phone: (253)833-1248 Fax: (253)735-0113						
Designing engineer: MATT CARLMAN						
Job Site: KIRKLAND PARKPLACE						
Authority having jurisdiction: CITY OF KIRKLAND						
Part No.	Qty.	Description	Standby	Total Standby	Alarm	Total Alarm
Panel Equipment						
HPF24S6_MB	1	PANEL CARD, MAIN BOARD, 6A	91.0000mA	91.0000mA	145.0000mA	145.0000mA
		Total Panel Stby	91.0000mA	Total Panel Alarm	145.0000mA	
Peripheral Devices						
GCS24CR	20	STROBE, M-C, RED, CEILING (Notification)	0.0000mA	0.0000mA	120.0000mA	2400.0000mA
GCC24-CR	8	HORN/STROBE, 2 WIRE, M-C, RED, CEILING (Notification)	0.0000mA	0.0000mA	143.0000mA	1144.0000mA
GCC24-CR	6	HORN/STROBE, 2 WIRE, M-C, RED, CEILING (Notification)	0.0000mA	0.0000mA	243.0000mA	1458.0000mA
EOL	4	END OF LINE RESISTOR (Notification)	0.0000mA	0.0000mA	0.0000mA	0.0000mA
GCC24-CR	2	HORN/STROBE, 2 WIRE, M-C, RED, CEILING (Notification)	0.0000mA	0.0000mA	223.0000mA	446.0000mA
			Total Peripheral Stby	0.0000mA	Total Periph Alarm	5448.0000mA
			Total Standby Amps	91.0000mA	Total Alarm Amps	5593.0000mA
Standby time: 24 Hrs						2.184Ah
Alarm time: 5 Min						0.466Ah
Battery requirement:						2.65Ah
Compensation Factors - Standby: 1.2 Alarm: 1.2 Requirement with compensation:						3.18Ah

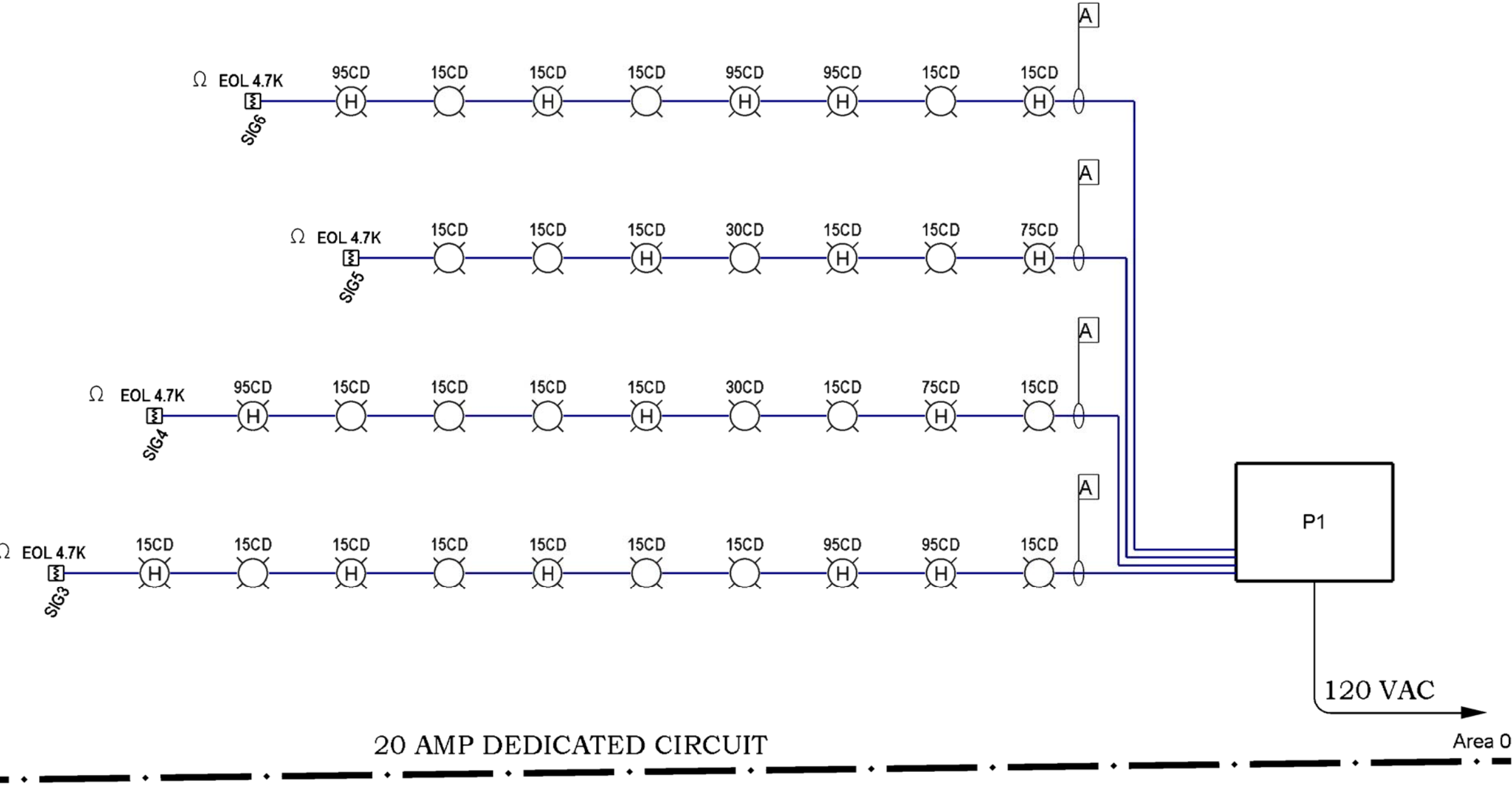
Circuit Calculations Panel: P1 Card: 00 Circuit:SIG3						
CircuitName: SIG3						
Circuit Type: Notification Terminal Voltage: 20.4V.DC Amperage: 2.0000A						
Cable: 14/2 SOL JKT FPLP 1M RL RED #14						
Calculations based on Running Total Length.						
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%						
Device	Part No	Appliance Desc	Distance	Current	Voltage	Voltage Drop
HPF24S6 Panel					20.4V	
1	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	23'-0	120.0000mA	20.2258V	(0.1742V)
2	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 95CD	32'-0	243.0000mA	20.0026V	(0.2232V)
3	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 95CD	62'-0	243.0000mA	19.6455V	(0.3571V)
4	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	22'-0	120.0000mA	19.5455V	(0.1V)
5	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	29'-0	120.0000mA	19.4311V	(0.1144V)
6	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	18'-0	143.0000mA	19.3709V	(0.0602V)
7	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	13'-0	120.0000mA	19.3367V	(0.0342V)
8	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	11'-0	143.0000mA	19.3143V	(0.0223V)
9	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	16'-0	120.0000mA	19.2933V	(0.021V)
10	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	16'-0	143.0000mA	19.2819V	(0.0114V)
10	EOL	END OF LINE RESISTOR	4'-0	0.0000mA	19.2819V	(0V)
			246'-0	1515.0000mA		
			Total Current: 1515.0000mA			
			(Total VDrop Percent:5.48%)		Total Voltage Drop : 1.1181V	

FIRE ALARM SYSTEM OPERATIONAL MATRIX						
		ALARM	TROUBLE	SUPERVISORY	MISCELLANEOUS	
CAUSE		EFFECT	EFFECT	EFFECT	EFFECT	REMARKS
SMOKE/HEAT DETECTORS MANUAL PULL STATION SYSTEM RESET SIGNAL SILENCE AC POWER FAILURE FIRE ALARM TROUBLE (OPEN SHORTS OR GROUNDING ON INITIATION OR SIGNALING CIRCUITS TAMPER SWITCHES WATERFLOW SWITCH	INITIATION	INITIATION	INITIATION	INITIATION	INITIATION	
	INITIATION	INITIATION	INITIATION	INITIATION	INITIATION	
	INITIATION	INITIATION	INITIATION	INITIATION	INITIATION	
	INITIATION	INITIATION	INITIATION	INITIATION	INITIATION	

Circuit Calculations Panel: P1 Card: 00 Circuit:SIG4						
CircuitName: SIG4						
Circuit Type: Notification Terminal Voltage: 20.4V.DC Amperage: 2.0000A						
Cable: 14/2 SOL JKT FPLP 1M RL RED #14						
Calculations based on Running Total Length.						
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%						
Device	Part No	Appliance Desc	Distance	Current	Voltage	Voltage Drop
HPF24S6 Panel					20.4V	
1	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	30'-0	120.0000mA	20.2007V	(0.1993V)
2	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 75CD	20'-0	223.0000mA	20.0798V	(0.1209V)
3	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	29'-0	120.0000mA	19.9388V	(0.143V)
4	GCS24CR	STROBE, M-C, RED, CEILING, 30CD	28'-0	120.0000mA	19.8155V	(0.1212V)
5	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	17'-0	143.0000mA	19.7521V	(0.0634V)
6	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	13'-0	120.0000mA	19.7129V	(0.0392V)
7	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	13'-0	120.0000mA	19.6815V	(0.0314V)
8	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	24'-0	120.0000mA	19.638V	(0.0436V)
9	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 95CD	33'-0	243.0000mA	19.5979V	(0.0401V)
9	EOL	END OF LINE RESISTOR	3'-0	0.0000mA	19.5979V	(0V)
			210'-0	1329.0000mA		
			Total Current: 1329.0000mA			
			(Total VDrop Percent:3.93%)		Total Voltage Drop : 0.8021V	

Circuit Calculations Panel: P1 Card: 00 Circuit:SIG5						
CircuitName: SIG5						
Circuit Type: Notification Terminal Voltage: 20.4V.DC Amperage: 2.0000A						
Cable: 14/2 SOL JKT FPLP 1M RL RED #14						
Calculations based on Running Total Length.						
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%						
Device	Part No	Appliance Desc	Distance	Current	Voltage	Voltage Drop
HPF24S6 Panel					20.4V	
1	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 75CD	58'-0	223.0000mA	20.1132V	(0.2868V)
2	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	22'-0	120.0000mA	20.0289V	(0.0843V)
3	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	15'-0	143.0000mA	19.9805V	(0.0485V)
4	GCS24CR	STROBE, M-C, RED, CEILING, 30CD	25'-0	120.0000mA	19.9176V	(0.0629V)
5	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	12'-0	143.0000mA	19.8946V	(0.023V)
6	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	15'-0	120.0000mA	19.8766V	(0.018V)
7	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	13'-0	120.0000mA	19.8688V	(0.0078V)
7	EOL	END OF LINE RESISTOR	3'-0	0.0000mA	19.8688V	(0V)
			163'-0	989.0000mA		
			Total Current: 989.0000mA			
			(Total VDrop Percent:2.60%)		Total Voltage Drop : 0.5312V	

Circuit Calculations Panel: P1 Card: 00 Circuit:SIG6						
CircuitName: SIG6						
Circuit Type: Notification Terminal Voltage: 20.4V.DC Amperage: 2.0000A						
Cable: 14/2 SOL JKT FPLP 1M RL RED #14						
Calculations based on Running Total Length.						
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%						
Device	Part No	Appliance Desc	Distance	Current	Voltage	Voltage Drop
HPF24S6 Panel					20.4V	
1	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	9'-0	143.0000mA	20.3331V	(0.0619V)
2	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	20'-0	120.0000mA	20.2149V	(0.1232V)
3	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 95CD	31'-0	243.0000mA	20.0426V	(0.1724V)
4	GCS24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 95CD	44'-0	243.0000mA	19.8514V	(0.1912V)
5	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	33'-0	120.0000mA	19.7481V	(0.1033V)
6	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 15CD	12'-0	143.0000mA	19.7177V	(0.0304V)
7	GCS24CR	STROBE, M-C, RED, CEILING, 15CD	12'-0	120.0000mA	19.696V	(0.0218V)
8	GCC24-CR	HORN/STROBE, 2 WIRE, M-C, RED, CEILING, 95CD	42'-0	243.0000mA	19.6498V	(0.051V)
8	EOL	END OF LINE RESISTOR	3'-0	0.0000mA	19.6498V	(0V)
			206'-0	1375.0000mA		
			Total Current: 1375.0000mA			
			(Total VDrop Percent:3.70%)		Total Voltage Drop : 0.7551V	




WIRE DIAGRAM

Must Remain On Site

GENERAL NOTES / SCOPE OF WORK

1. FACTORY RECOMMENDED MINIMUM WIRING SIZES, TYPE AND CONSTRUCTION AS NOTED ON THE DRAWINGS MUST BE STRICTLY FOLLOWED. ANYONE WISHING TO MAKE CHANGES WILL DO SO AT THERE OWN RISK!!
2. THE CIRCUIT ROUTING AND WIRING COUNTS ON THE FLOOR PLAN DRAWINGS ARE SHOWN DIAGRAMMATIC BASED ON CONTINUOUS AND SHORTEST POSSIBLE ROUTING FROM THE CONTROL PANEL AND BETWEEN CONNECTED FIELD DEVICES WITH NO PHYSICAL OBSTRUCTIONS. THE WIRING OR CIRCUIT COUNTS (IF SHOWN) ARE PROVIDED AS A CONVENIENCE ONLY AND AS MEANS TO HASTEN INSTALLATION OR TO DETERMINE WIRING ROUTS.
3. WIRE SHOWN IN THIS DRAWING SET IS PERMITTED IN RACEWAYS LEADING TO FIRE PROTECTION EQUIPMENT. OTHER WIRE SHALL NOT BE PERMITTED.
4. FIRE ALARM SYSTEM INSTALLATION SHALL CONFORM WITH THE LATEST U.L., N.E.C., N.F.P.A., W.A.C., AND OTHER STANDARDS AS APPLICABLE TO THE CITY STANDARDS.
5. WHEN NECESSARY, DUE TO CHANGING DESIGN REQUIREMENTS, FACTORY AVAILABILITY, ETC. FIRE SYSTEMS WEST RESERVES THE RIGHT TO SUBSTITUTE EQUIPMENT HEREIN MENTIONED OR SPECIFIED, WITH EQUIPMENT OF EQUAL OR BETTER QUALITY, FUNCTION AND DESIGN.
6. PARALLEL BRANCHING OF WIRE TO ALL NOTIFICATION APPLIANCE CIRCUITS SHALL NOT BE PERMITTED.
7. PARALLEL BRANCHING OF WIRE TO ANALOG INITIATING DEVICE CIRCUITS IS PERMISSIBLE.
8. THIS SPACE IS EQUIPPED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM.
9. FIRE SYSTEMS WEST WILL BE INSTALLING NEW FIRE ALARM NOTIFICATION DEVICES FOR TENANT IMPROVEMENT.

FIRE ALARM SYSTEM INFORMATION	
INSTALLER/SUPPLIER	
SITE CONTACT:	DESIGN/SUPPLIER:
TABLEAU	FIRE SYSTEMS WEST, INC.
401 PARK PLACE CENTER	206 FRONTAGE ROAD NORTH, STE C
KIRKLAND, WA 98033	PACIFIC, WASHINGTON 98047
PHONE:	PHONE: (253) 833-1248
FAX:	FAX: (253) 735-0113
WA ST LICENSE: F1RESW1140B1	WA ST LICENSE: F1RESW055LW
DESIGNER	
MATT CARLMAN	
FIRE SYSTEMS WEST, INC	
206 FRONTAGE ROAD NORTH, STE C	
PACIFIC, WASHINGTON 98047	
PHONE: (253) 833-1248	
FAX: (253) 735-0113	
x 	
FOR FIRE DEPARTMENT USE ONLY	

